

What is claimed is:

1. A hand operated syringe for injecting a liquid, comprising:
  - a) an elongated barrel having proximal and distal ends and an exit orifice at its distal end;
  - 5 b) a pair of opposing finger grips carried at the proximal end of the barrel, each having a proximal inner portion defining a most proximal pressure point closely adjacent the barrel to which finger pressure is applied proximally during operation of the syringe, said points defining a plane substantially perpendicular to the barrel's axis;
  - 10 c) a plunger received in the barrel and having a proximal end protruding from the barrel, said proximal end including a pressure surface adapted to receive manual pressure; the plunger being movable between retracted and fully inserted positions within the barrel to discharge a volume of liquid through the exit orifice, the pressure surface of the plunger and the finger pressure points closely adjacent the barrel being so arranged that when the plunger is in its fully  
15 inserted position, its pressure surface is spaced distally of said plane.
2. The syringe of claim 1 wherein the volume is from about 3 cm<sup>3</sup> to about 20 cm<sup>3</sup>.
3. The syringe of claim 1 wherein the volume is from about 5 cm<sup>3</sup> to about 10 cm<sup>3</sup>.
4. A hand operated syringe for injecting a liquid, comprising:
  - 20 a) an elongated barrel having proximal and distal ends and an exit orifice at its distal end;

b) a pair of opposing finger grips carried at the proximal end of the barrel, each having a proximal inner portion defining a most proximal pressure point closely adjacent the barrel to which finger pressure is applied proximally during operation of the syringe, said points defining a plane substantially perpendicular to the barrel's axis;

c) a plunger received in the barrel and having a proximal end protruding from the barrel, said proximal end including a pressure surface adapted to receive manual pressure; the plunger being movable between retracted and fully inserted positions within the barrel to discharge a volume of liquid through the exit orifice, the pressure surface of the plunger and the finger pressure points closely adjacent the barrel being so arranged that when the plunger is in its fully inserted position, its pressure surface lies substantially in said plane.

5. A hand operated syringe for injecting a liquid, comprising:

a) an elongated barrel having proximal and distal ends and an exit orifice at its distal end, the barrel defining a fluid reservoir having a cross-sectional area  $A'$

b) a pair of opposing finger grips carried at the proximal end of the barrel, each having a proximal inner portion defining a pressure point to which finger pressure is applied proximally during operation of the syringe, said points laying in a plane substantially perpendicular to the barrel's axis;

c) a plunger received in the barrel and having a proximal end protruding from the barrel, said proximal end including a pressure surface adapted to receive manual pressure; the plunger being movable through a stroke length  $S$  between

retracted and fully inserted positions within the barrel to discharge a volume  $V$  of fluid through the its exit orifice, wherein, when the plunger is in its fully inserted position, its pressure surface is spaced distally of said plane by a distance  $L$ , where  $L$  is greater than or equal to  $0.01S$ .

- 5 6. The syringe of claim 5 wherein volume  $V$  is from about  $3 \text{ cm}^3$  to about  $20 \text{ cm}^3$ .
7. The syringe of claim 5 wherein volume  $V$  is from about  $5 \text{ cm}^3$  to about  $10 \text{ cm}^3$ .
8. The syringe of claim 5 wherein area  $A$  is less than 0.3 square inches.
9. The syringe of claim 5 wherein area  $A$  is about 0.2 square inches.
10. The syringe of claim 5 wherein distance  $L$  is greater than or equal to about  $0.02S$ .
11. The syringe of claim 5 wherein distance  $L$  is about  $0.06S$ .